

HPH
August 16, 1955

Dr. Paul Kotin
School of Medicine
1200 N. State Street
Los Angeles 33, California

Dear Dr. Kotin:

In our conversation the other day you were interested in the significance of the unique labeling encountered during the dark fixation of $C^{14}O_2$ by tobacco leaves. It should be emphasized that only the organic acid fraction and those few amino acids which are formed by transamination from α -keto acids will become radioactive even after extended periods of time. None of the carbohydrates or phosphorylated compounds pick up the label. If the alkaloids are labeled, it is at such a low level that we are unable to detect it.

Thus a method is available for the selective labeling of compounds within a tobacco leaf. If one were interested in the fate of the organic acids during the course of combustion of the cured leaf, it would be a simple matter to expose leaves to $C^{14}O_2$ in the dark then transfer them to the curing shed without exposure to light. It should be emphasized that in the presence of light the fixed CO_2 will be metabolized to all of the products normally encountered in photosynthesis.

If there is any further information that would interest you, please do not hesitate to call or write.

Sincerely,

Paul Saltman, Ph.D.
Assistant Professor

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